

1 What is claimed is:

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3 **1.** A computer readable medium on which is embedded computer software, the software
4 comprising:

5 a base class that defines a parent-child relationship by which a child object is
6 stored within the storage space of its parent object;

7 an inline class, wherein the inline class is an extension of the base class and
8 wherein a member of the inline class is permitted to be a child object but prohibited from
9 being a parent object; and

10 a container class, wherein the container class is an extension of the base class and
11 wherein a member of the container class is permitted to be a child object and/or a parent
12 object;

13 whereby a well-formed document can be modeled in software using members of the inline
14 and/or container classes.

15
16 **2.** The computer readable medium of claim 1 wherein the document is a markup language
17 document.

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19 **3.** The computer readable medium of claim 2 wherein the markup language is selected
20 from the group consisting of HTML, XML, XHTML and SGML.

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22 **4.** The computer readable medium of claim 1 wherein the software further comprises:
23 an extension of the inline class.

24
25 **5.** The computer readable medium of claim 4 wherein the extension of the inline class
26 corresponds to a document item selected from a group consisting of comment text,
27 formatted text, embedded text, an image, an anchor, a paragraph marker, a line break and
28 a horizontal rule.

1 6. The computer readable medium of claim 1 wherein the software further comprises:
2 an extension of the container class.

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4 7. The computer readable medium of claim 6 wherein the extension of the container class
5 corresponds to a document item selected from a group consisting of a bold text item, a
6 horizontally centered item, a table, a subdocument and a selection list.

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8 8. The computer readable medium of claim 1 wherein the container class corresponds to a
9 document item in which other items can be nested.

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11 9. The computer readable medium of claim 1 wherein the software further comprises:
12 an extension to an extension of the inline and/or container classes.

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14 10. A method for use in developing a document-producing computer program, the
15 method comprising the step of utilizing a set of classes, the set of classes comprising:
16 a base class that defines a parent-child relationship by which a child object is
17 stored within the storage space of its parent object;
18 an inline class, wherein the inline class is an extension of the base class and
19 wherein a member of the inline class is permitted to be a child object but prohibited from
20 being a parent object; and
21 a container class, wherein the container class is an extension of the base class and
22 wherein a member of the container class is permitted to be a child object and/or a parent
23 object.

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25 11. The method of claim 10 wherein the document is a markup language document.

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27 12. The computer readable medium of claim 11 wherein the markup language is selected
28 from the group consisting of HTML, XML, XHTML and SGML.

1 **13.** The method of claim 10 wherein the set of classes further comprises:

2 an extension of the inline class.

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4 **14.** The method of claim 13 wherein the extension of the inline class corresponds to a
5 document item selected from a group consisting of comment text, formatted text,
6 embedded text, an image, an anchor, a paragraph marker, a line break and a horizontal
7 rule.

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9 **15.** The method of claim 10 wherein the set of classes further comprises:

10 an extension of the container class.

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12 **16.** The method of claim 15 wherein the extension of the container class corresponds to a
13 document item selected from a group consisting of a bold text item, a horizontally
14 centered item, a table, a subdocument and a selection list.

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16 **17.** The method of claim 10 wherein the container class corresponds to a document item
17 in which other items can be nested.

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19 **18.** The method of claim 10 wherein the set of classes further comprises:

20 an extension to an extension of the inline and/or container classes.

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22 **19.** The method of claim 10 wherein the utilizing step comprises:

23 linking to a library containing the set of classes; and
24 programmatically invoking an extension of the inline and/or container classes.

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26 **20.** A computer readable medium on which is embedded a document-producing computer
27 program, the computer program comprising a product of a method, the method comprising
28 the step of utilizing a set of classes, the set of classes comprising:

29 a base class that defines a parent-child relationship by which a child object is
30 stored within the storage space of its parent object;

1 an inline class, wherein the inline class is an extension of the base class and
2 wherein a member of the inline class is permitted to be a child object but prohibited from
3 being a parent object; and

4 a container class, wherein the container class is an extension of the base class and
5 wherein a member of the container class is permitted to be a child object and/or a parent
6 object.
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